

## SECTION C – PERFORMANCE WORK STATEMENT

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## C.1 BACKGROUND

The United States Bureau of the Census is a bureau of the U.S. Department of Commerce (DOC) and is one of several principal federal agencies that provide statistical services. The Census Bureau is charged with providing ongoing measures of the U.S. population and its economy. The Census Bureau, which supports the economic and political foundations of the United States, provides a critical service to the nation. Therefore, reliable collection, preparation, tabulation and dissemination of demographic and economic statistics are vital to the Census Bureau's overall mission and strategic goals and objectives.

The Data Access and Dissemination System (DADS) Program is the primary provider of dissemination services via the Internet for the Census Bureau and a significant provider of tabulation services.

DADS comprises a suite of inter-related systems, including the American FactFinder system for dissemination of data and data products, the Data Product Production (DPP) system for Census 2000 product tabulations, and the American FactFinder Advanced Query system for Census 2000 ad hoc queries. The DADS Program is responsible for building, maintaining, and operating these systems.

DADS Program Business Operations uses these systems to provide tabulation and dissemination services. Tabulation services refer to the activities related to aggregating data collected on individual responses to a survey or census into summarized statistical data suitable for public release. Dissemination services refer to the activities related to the internal staging and release of approved statistics for posting on the Internet. These services include the provision of interim results or output so that other areas of the Census Bureau can process and release data in different media and formats, (e.g. CD-ROM, DVD, File Transfer Protocol [FTP], Adobe Acrobat [PDF] for printed publications). The DADS Program currently provides tabulation and dissemination services for the decennial censuses and dissemination services for the economic censuses and surveys, annual economic surveys, the annual release of the American Community Survey, and the annual release of Population Estimates.

DADS was developed in multiple phases. In 1995, the Census Bureau launched DADS as a pilot project. Following the pilot, a contract was awarded to IBM in April 1997. During the first production phase, the pilot produced systems to support the 1990 Census, the Census 2000 Dress Rehearsal, the 1997 Economic Census, and the demonstration phase of American Community Survey. During the second production phase, the pilot updated and extended the systems to include Census 2000 data and additional Census Bureau data sets. The DADS Program continues to broaden and extend its legacy systems to respond to the public's growing demands for demographic and economic information.

## C.2 PROGRAM MISSION, GOALS AND OBJECTIVES

The mission of the DADS Program is to prepare, tabulate, and disseminate data and data products that are complete, accurate, and formatted properly, on time and within budget. The Contractor is considered a full partner with the Census Bureau in all activities leading to the success of the DADS Program.

An example of how the DADS Program supports the overall Census Bureau operations includes the efforts undertaken in support of the legislative redistricting program. Public Law 94-171, enacted in 1975, directs the Census Bureau to make special preparations to provide redistricting data needed by the 50 states. It specifies that within one year following the Census Day (i.e., for Census 2010 by April 1, 2011), the Census Bureau must send to the governor and legislature in each state the data they need to redraw districts for the United States Congress and state legislatures. The National File provides data in a hierarchical sequence down to the block level (state, county, voting district/remainder, county subdivision, place/remainder, census tract, block group, block). The file contains four tables: (1) a count of all persons by race (Table PL1); (2) a count of Hispanic or Latino and a count of not Hispanic or

Latino (Table PL2); (3) a count of the population 18 years and older by race (Table PL3); a count of Hispanic or Latino and a count of not Hispanic or Latino by race for the population 18 years and older (Table PL4). The DADS Program is responsible for the tabulation and dissemination of this data.

The goals and objectives of the DADS Program are stated in Table C.2-1 and directly support the following Census Bureau strategic goals and objectives:

- Produce new information using existing data sources by developing cutting-edge techniques and promoting knowledge sharing (Goal/Objective 1.4)
- Meet program collections, processing, and dissemination requirements by providing a secure information technology environment (Goal/Objective 4.4)
- Improve timeliness, accuracy and relevance of our surveys and censuses through new applications of technologies and methodologies and share them globally (Goal/Objective 4.5)
- Meet the changing needs of our customers by enhancing data products, services and dissemination (Goal/Objective 4.6).

**Table C.2-1 DADS Program Goals and Objectives**

<b>Goals</b>	<b>Objectives</b>
1. Maximize the efficiency, timeliness and accuracy of the tabulation and dissemination products and services.	1.1 Meet all legal deadlines and external commitments. 1.2 Contribute to the overall improvement of the quality and accuracy of the data and data products. 1.3 Reduce the elapsed time required to produce releasable data and data products. 1.4 Simplify and standardize the processes for tabulation and dissemination. 1.5 Maintain continuity of tabulation and dissemination business operations in a changing environment.
2. Minimize the cost of tabulation and dissemination.	2.1 Implement process improvement initiatives to drive down the cost of tabulation and dissemination. 2.2 Reduce cost through collaboration with other Census Bureau organizations that perform tabulation and dissemination. 2.3 Leverage existing Census Bureau resources, processes and systems.
3. Increase user satisfaction with tabulation and dissemination products and services.	3.1 Ensure management and control of data privacy and confidentiality. 3.2 Maintain high system availability. 3.3 Increase user satisfaction with ability to find and acquire Census Bureau data and data products. 3.4 Increase user satisfaction with the usefulness and relevance of Census Bureau data and data products. 3.5 Develop new, more useful data products and services using existing Census Bureau data. 3.6 Strengthen the effectiveness of secondary distributors of Census Bureau data and data products.

### **C.3 CONTRACT SCOPE**

The Contractor, as an independent entity and not an agent or employee of the Government, **shall** furnish to the Government all necessary labor, services (non-personal), and materials (except as specified by the Government) required to accomplish the efforts as specifically set forth in this Performance Work Statement.

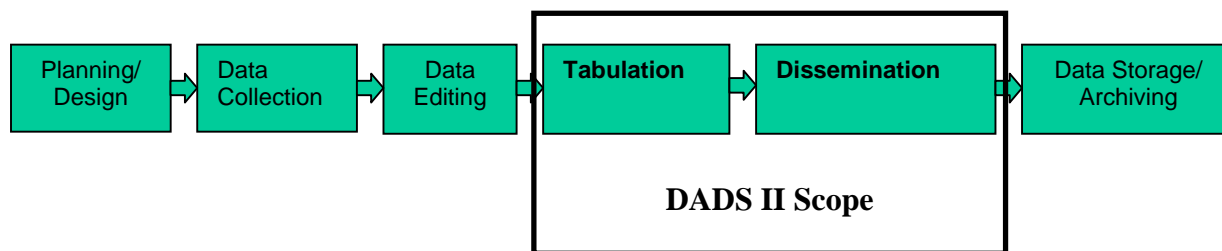
This solicitation, which is referred to as DADS II, requires the Contractor to provide comprehensive support to DADS Program tabulation and dissemination services. The Government recognizes that DADS Systems are approaching obsolescence. This solicitation also requires the Contractor to provide a replacement of the legacy systems to form an integrated solution. This solicitation also requires the Contractor to propose, as an option, the replacement of the Ad Hoc Tabulation system (i.e., Advanced Query). (See Section C.4.1, Business Operations – Tabulation and Section C.6 – Option for Ad Hoc Tabulation Replacement)

Following is the broad scope of the DADS Program in which the Contractor and the Government work as full partners:

- Business Operations - Tabulation
- Business Operations - Dissemination
- DADS Requirements Management
- System Life Cycle Management
- System Engineering and Architecture
- Security
- Replacement of DADS Systems
- Program Management

These major tasks are discussed in Section C.4, *Technical Requirements*.

Figure C.3-1 depicts a generalized information flow for the Census Bureau's census and survey work, and demonstrates where DADS Business Operations fit into overall bureau operations. Planning/Design covers decision-making that will govern the when, what and how of all subsequent processes. Although the DADS Program does not have responsibility for Planning/Design, the program is a participant when tabulation and dissemination processes are the subject of discussion. The Data Collection and Data Editing processes cover upstream activities for which DADS has no responsibilities or does not participate.



**Figure C.3-1 Census or Survey Business Process Flow**

It is probable that the DADS Program will support additional censuses and surveys, and expand product offerings through the duration of this contract.

The legacy DADS suite of inter-related systems is shown in Table C.3-2. These systems provide the automated capabilities required to support tabulation and dissemination. Additional information on DADS is provided in the documents listed in Table C.3-3.

**Table C.3-2 DADS Legacy Suite of Systems**

System	Tabulation	Dissemination
Data Product Production System	Yes	No
American FactFinder	No	Yes
Advanced Query (Ad Hoc Tabulation)	Yes	Yes
Virtual Table Generator	No	Yes
Printed Reports System	No	Yes

Table C.3–3 Section J Documents

Section	Document Name
J-1	System Requirements Document
J-2	Award Fee Determination Plan
J-3	Quality Assurance Surveillance Plan
J-4	Performance Measures
J-5	Census Bureau IT Security Program Policies
J-6	Census Bureau Published IT Standards
J-7	DADS Overview
J-8	Change Management Strategy
J-9	Requirements Management Plan
J-10	Reserved
J-11	Accreditation Flow Diagram
J-12	Government Estimate of Hours
J-13	Government Furnished Equipment and Software
J-14	Contract Deliverables List
J-15	Census Bureau Enterprise Architecture (Go-To)
J-16	2010 Decennial Census Architecture

The DADS II contract, which will cover nine (9) years and nine (9) months, is performance based. It will have a nine (9) month Base Period, and nine (9) one (1) year Option Periods. The contract Base Period and Option Periods are as follows:

Contract Base Period	September 29, 2006 – June 30, 2007
Contract Option Period 1	July 1, 2007 – June 30, 2008
Contract Option Period 2	July 1, 2008 – June 30, 2009
Contract Option Period 3	July 1, 2009 – June 30, 2010
Contract Option Period 4	July 1, 2010 – June 30, 2011
Contract Option Period 5	July 1, 2011 – June 30, 2012
Contract Option Period 6	July 1, 2012 – June 30, 2013
Contract Option Period 7	July 1, 2013 – June 30, 2014
Contract Option Period 8	July 1, 2014 – June 30, 2015
Contract Option Period 9	July 1, 2015 – June 30, 2016

The DADS II contract consists of three phases of work. The three phases of work are not defined by specific dates, but do have hard deadlines that must be met. The three phases of work are as follows:

- Phase 1, Transition Planning: Begins upon notice to proceed and continues for no more than ninety (90) days.
- Phase 2, Transition: Begins at the end of Phase 1, Transition Planning and continues for no more than six (6) months.
- Phase 3, Production: Begins at the end of Phase 2, Transition and continues through June 30, 2016.

Phase 1, Transition Planning, **shall** consist of, at most, three (3) months of transition planning activities that include the Contractor observing, interfacing with, and working with the incumbent Contractor and the Government to gain in-depth knowledge of the DADS Program, requirements and business processes. Phase 2, Transition consists of the Contractor incrementally assuming control of all activities in support of the requirements of this contract. Phase 3, Production consists of the Contractor continuing to provide production activities required by the contract. The three phases are discussed in more detail in Section C.5.3, Contract Transition.

After contract award, a Performance Work Statement will be issued on an annual basis that will definitively state the requirements for the next Contract Option Period. (See Section C.5.1, *Annual Proposal Process*.)

#### C.4 TECHNICAL REQUIREMENTS

This section describes the broad scope of the DADS Program, in which the Contractor and the Government work as full partners. The DADS Program has identified technical and subject matter skill sets that are required to perform the work specified in this Performance Work Statement. These skill sets include the following:

##### Technical Skill Sets

- Systems Analysis
- Systems Architecture
- Data Modeling
- Database Administration

- Relational Database Management System (i.e., Oracle®)
- Spatial Database Management (i.e., ArcSDE®)
- Geographic Information System (i.e., ArcIMS®)
- Software Engineering
- Software Design
- Software Coding (i.e., Java®)
- Software Configuration Tools (i.e., ClearCase®)
- User Interface Design
- Usability Testing
- Systems Administration
- IT Security
- Program Management Tools (e.g., Microsoft Project®, wInsight®)
- Requirements Management Tools (i.e., DOORS®)

#### Subject Matter Skill Sets

- Statistical Techniques
- Demographic Statistical Measures
- Economic Statistical Measures
- Geographic Concepts
- Table Design Principles
- Cartographic (Map) Design Principles
- Data Visualization Concepts
- Census and Survey Operations

#### C.4.1 Business Operations – Tabulation

Tabulation is the process by which record-level data from confidential microdata files, delivered from the data editing process, are aggregated into approved product formats suitable for public release. Typical product formats for release of this first level of data aggregation includes detailed tables, base tables and data sets. These products provide the most detailed aggregations of data made available to the public. The tabulation output also serves as an input to dissemination processes that may apply a second level of aggregation to create derived products. This second level of aggregation is considered a dissemination process rather than a tabulation process because microdata do not serve as the input.

Tabulation requires a complex overlay of techniques to prevent the disclosure of confidential census and survey information. Tabulation also requires varied and sometimes complex statistical techniques for aggregate calculations.

The Census Bureau demands 100% accuracy in its tabulation results. Efforts to achieve this objective require extensive quality assurance activities. Significant components of both a tabulation system and intermediate tabulation products are created specifically and only for the purposes of quality control.

Business Operations – Tabulation consists of batch tabulation processes and interactive Ad Hoc Tabulation processes. Batch tabulation is the process by which respondent level data from confidential microdata files, delivered from the data editing process, are aggregated into approved product formats suitable for public release. Batch data tabulation products are created from full, confidential microdata files that contain data about individual persons, households, or businesses. These confidential data are protected by Title 13 of the U.S. Code and are not made available to the public. Batch tabulation consists of acquiring product specifications and geographic input files necessary to fully tabulate a data product.

Data products generally are large scale with multiple table formats defined and tabulated for the many geographic areas defined for a particular survey or census.

The legacy DADS batch tabulation system, known as the Data Product Production (DPP) system, was developed to perform the tabulations required to support Census 2000. The DADS Program will be responsible for the same task for the 2010 Census. It is the program's intent to provide tabulation services for other censuses and surveys during the DADS II contract period.

Ad Hoc Tabulation is the process by which interactive tabulations are created on-demand, for authorized users, from full, confidential microdata files on the Internet using the legacy Advanced Query (AQ) system described in Table C.3-2 DADS Legacy Suite of Systems. The Ad Hoc Tabulation System provides a secure, restricted tabulation capability to authorized users. This system tabulates data into simple table formats and disseminates the results on-demand. Tabulation selection parameters and output are limited so as to comply with Title 13 of the U.S. Code and prevent disclosure of confidential information.

For more information on the tabulation data products for which the DADS Program is responsible, see Section J-1, *System Requirements Document*. For more discussion of tabulation processes see Section J-7, *DADS Overview*.

The Contractor **shall** conduct tabulation activities as required by the DADS Program. The Contractor **shall** process microdata and supplemental data inputs, including conducting Extract Transform and Load (ETL) and data verification. The Contractor **shall** coordinate with DADS Government staff and input providers to determine mutually agreed upon formats for data inputs, and **shall** record these agreements as formal specifications. The Contractor **shall** coordinate with DADS Government staff and output recipients to determine mutually agreed upon formats, and **shall** provide support to the census or survey sponsor to facilitate its review of tabulated outputs. Upon request, the Contractor **shall** provide comments to the census or survey sponsor on the design and content of tabulation data products.

At the Government's direction, the Contractor **shall** operate the tabulation system to generate production data products. Additionally, the Contractor **shall** sufficiently document the operation of the tabulation system so that the Government can operate the system to generate production data products, if it so chooses. The Contractor **shall** respond promptly to any system problems that may arise during production processing.

The Contractor is responsible for maintaining the legacy tabulation systems (i.e. DPP) until the systems are retired and a new batch tabulation system is in place. The legacy Ad Hoc Tabulation System (i.e., AQ) **shall** be maintained through September 30, 2011.

#### **C.4.2 Business Operations – Dissemination**

DADS dissemination operations consist of the internal staging and subsequent release of approved statistics via the Internet. Approved statistics are typically presented in the form of tables, maps, or charts intended for human viewing and interaction or in the form of data files designed for computer manipulation. Dissemination operations also include the provision of interim outputs for other areas of the Census Bureau to process and release in different media and formats (e.g., CD-ROM, DVD, FTP and PDF for printed publications). Additionally, operations include user-support services related to DADS dissemination applications (e.g., development of training materials, management of user feedback).

Dissemination takes as its input tabulated data along with product specifications, metadata, and geographic files. The creation of many product outputs requires additional aggregation of tabulated data inputs. These outputs are referred to as derived products because they are derived from the most detailed tabulated data publicly available.

The actual release of data and data products follows a highly variable schedule, reflecting the fluctuating rate at which data tabulations are produced for various programs. Phases of release for a single survey may span months or even years. Some typical release strategies are shown in Table C.4.2-1. Additionally, DADS must manage on-going releases for multiple programs at any one time, including the release of revised data or metadata to correct problems discovered with previously released data or data products.

**Table C.4.2-1 Typical Dissemination Release Strategies**

Release Strategy	Program or Product	Example
By geographic area	Census 2000 Summary File 4	Data products for several states released each week, with nation-level geographies crossing state lines included in the final week's release
By geographic type	Population Estimates Program	Data released first for the nation and for states, next for counties, and finally for cities and towns
By subject or topic	American Community Survey	Data released first for core products covering basic subject characteristics (e.g., age, sex) and several months later for additional products on same subjects but iterated for major race groups

Dissemination for just one program can involve data files containing millions of records, and require the creation of and public access to thousands of derived products. Dissemination typically requires a variety of data products and even different Web sites depending upon the targeted end user, spanning the spectrum from surfers to expert data users. Dissemination in multiple languages is required for some programs.

The Census Bureau demands a high-level of accuracy in its dissemination activities. Therefore, the DADS Program requires that data and data products be staged to an internal environment prior to public release to facilitate the review of data content for accuracy and completeness.

During the review period, DADS must support many redeliveries of corrected data or metadata.

Dissemination requires systems to make data products and to provide access to these products. The legacy DADS dissemination systems are American FactFinder, Advanced Query, Virtual Table Generator, and Printed Report System. These systems currently support dissemination operations for the following programs: Decennial Census, American Community Survey, Economic Census and Surveys, and Population Estimates Program. (See Table C.3-2)

For more information on the dissemination releases for which the DADS Program is responsible and dissemination requirements, see Section J-1, *System Requirements Document*. For more information on dissemination processes, see Section J-9, *DADS Overview*.

It is probable that the number of censuses and surveys that rely on DADS for dissemination services will increase during the period of performance. It is the program's intent to increase the usability and capabilities of its dissemination applications during the DADS II contract period. It is the program's expectation to improve responsiveness to internal data provider's needs for more frequent and flexible service.

The Contractor **shall** conduct dissemination activities as required by the DADS Program. The Contractor **shall** process data and metadata inputs, including conducting ETL and data verification. The Contractor **shall** coordinate with DADS Government staff and input providers to determine mutually agreed upon formats for inputs and **shall** record these agreements as formal specifications. The Contractor **shall** coordinate with DADS Government staff and output recipients to determine mutually agreed upon formats and **shall** provide support to the census or survey sponsor to facilitate the sponsor's review of pre-release product outputs. Upon request, the Contractor **shall** provide comment to the census or survey sponsor on the design and content of data products.

The Contractor **shall** maintain and enhance DADS dissemination applications as required to meet dissemination commitments. The Contractor **shall** operate the dissemination system to generate data products and to provide access to data products. Additionally, the Contractor **shall** sufficiently document the operation of the dissemination system so that the Government can operate the system to create and disseminate production data and data products. The Contractor **shall** respond promptly to any system problems that may arise during production processing.

The Contractor is responsible for maintaining the legacy dissemination systems until the systems are retired.

### C.4.3 DADS Requirements Management

The Government identifies stakeholder needs and operational capabilities and records them as DADS program requirements. Program requirements include high-level statements as well as low-level statements and data product specifications. The DADS high-level program requirements are described in Section J-1, *System Requirements Document*, and presented in Section J-1 Appendix A and D, *Requirements Traceability Matrix*. The *System Requirements Document (SRD)* describes DADS business processes and major data products and shows the traceability of program requirements to DADS goals and objectives.

The Government's approach to requirements management is described in Section J-9 *Requirements Management Plan*. The Government's *Requirements Management Plan* (Government's *RMP*) describes the process for managing DADS requirements and for maintaining requirements baselines. The process is used to preserve bi-directional traceability for all baselined requirements. Requirements changes are anticipated throughout the system life cycle as a result of ongoing Business Operations. Requirements changes support new and updated data products and product specifications and are responsive to end-user concerns.

The Government will have primary responsibility for developing and maintaining program requirements. The Contractor **shall**, at the direction of the Government, assist the Government in the development and maintenance of program requirements.

The Offeror **shall** submit with the response to this solicitation a *Requirements Development and Management Plan (RDMP)* that documents the requirements development and management process,

which integrates with the Offeror's system life cycle. The Contractor **shall** use its requirements development and management process and evolve the process, as necessary, to adapt to the Government's business needs.

The Contractor's *RDMP* **shall** be consistent with processes described and referenced in the Government's *RMP*. The Government and the Contractor **shall** conduct a review and update as necessary the Contractor's *Requirements Development and Management Plan* as part of the annual proposal process to ensure the continued effectiveness of the Contractor's requirements development and management processes.

The Contractor's requirements development and management process **shall** be used to derive the system requirements from the program requirements. The Contractor **shall** document the system requirements in an expanded *Requirements Traceability Matrix (RTM)* and describe them in the Contractor's *System Requirements Specification (SRS)*. The Contractor's requirements development and management process **shall** provide bi-directional traceability between the program requirements and the system requirements. The Contractor's requirements development and management process **shall** manage additions, changes, and deletions to system requirements as change events occur. The Contractor's requirements development and management process **shall** substantiate that the applications, data and data products conform to requirements. The Contractor **shall** use its requirements development and management process to establish, maintain, and keep current the system requirements baseline. The Contractor's requirements development and management process **shall** include technical, cost, and schedule impact analysis of proposed modifications to the requirements.

The Contractor **shall** support the Government in selecting, prioritizing, and allocating existing or new requirements to baseline an application release.

During Phase 1, Transition Planning, the Contractor **shall** observe, interface with, and work with the incumbent Contractor and the Government to gain in-depth knowledge of the DADS Program and existing system requirements.

As part of the annual proposal process, the Contractor **shall** provide an expanded *RTM* and the Contractor's *SRS*. The Contractor's *SRS* **shall** be consistent with the Government's *RMP* and the Government's *SRD*. In addition, the Contractor **shall** have the capability to provide upon request an analysis of the program requirements that are fully implemented in existing systems, partially implemented in existing systems, and not yet implemented. The Contractor's analysis **shall** include recommendations, with technical, cost, and schedule impact, for proposed allocation and reallocation of requirements to future software releases.

Upon Government review and approval of the expanded *RTM* and the Contractor's *SRS*, the Contractor **shall** bring the system requirements under baseline control and apply the change control discipline, as defined in the Contractor's *RDMP*, to affect all modifications to the baseline.

The Contractor **shall** establish and maintain an automated requirements repository that includes the requirements from the initial baseline documented in the *RTM*. The repository **shall** track requirements, and **shall** be accessible by the Government. The Contractor **shall** have the capability to provide an expanded *RTM* and the Contractor's *SRS* upon request. The Contractor **shall** use the Government's automated requirements repository Telelogic's DOORS®.

The Contractor **shall** implement DADS Program requirements and approved changes to DADS program requirements.

#### C.4.4 System Life Cycle Management

The DADS Program employs a system life cycle methodology with phases similar to those of a typical system life cycle: requirements, analysis, design, construction, testing, user acceptance, deployment, and operate/maintain. The DADS Program uses the system life cycle to organize and accomplish its work, regardless of whether the work is hardware life cycle activity, the development of software applications or the use of such applications to produce and disseminate data and data products.

The Government expects that the Contractors is well versed in system life cycle methodologies, but may be less clear on how those processes apply to DADS Business Operations. To add clarity, Table C.4.4-1 provides examples of work undertaken and questions addressed during system life cycle phases for both software releases and data releases. Examples of hardware life cycle activities can be found in Section C.4.5.1 Infrastructure Maintenance and C.4.5.2 Technology Refresh.

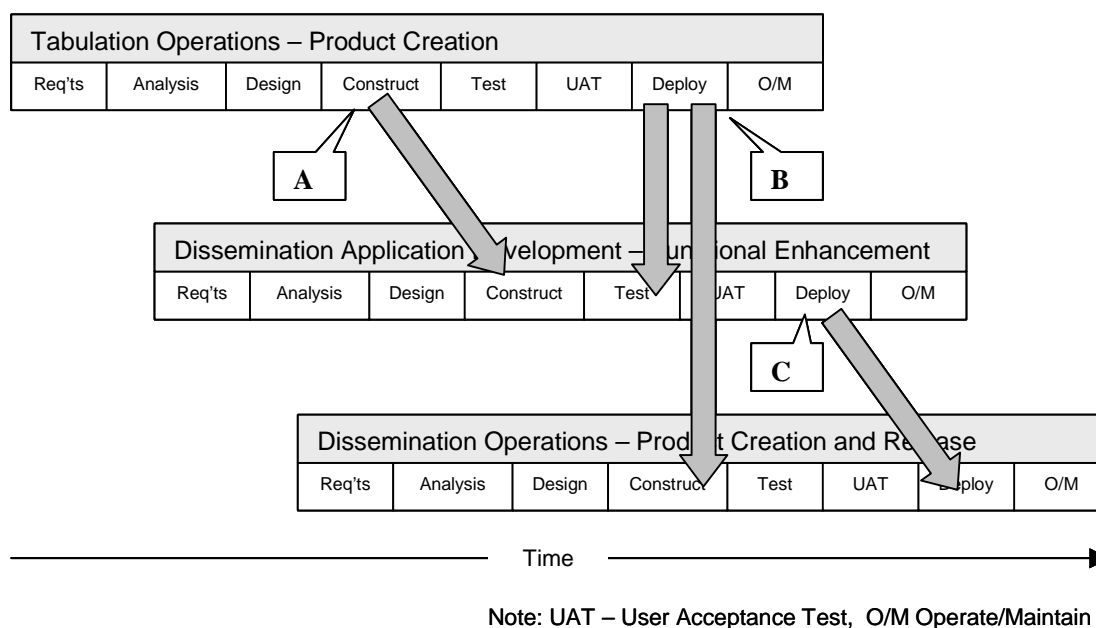
**Table C.4.4-1 DADS System Life Cycle Examples**

Life Cycle Phase	Software Release	Data Product Release (Business Operations)
<b>Requirements</b>	- Which functions will users need to manipulate or view the data product?	- Will data products be released in a single phase or in multiple phases? - Will DADS create data products or just assemble / distribute?
<b>Analysis</b>	- Which system functions are absent or need enhancement?	- Which ETL scripts need to be created or updated? - Which product creation processes need modification?
<b>Design</b>	- Produce user interface design for new/enhanced function. - Produce code and database design to implement function.	- Define specific changes to be applied to the product creation processes.
<b>Construction</b>	- Write and unit test software. - Modify database structures, as needed.	- Create ETL scripts. - Load data and metadata inputs. - Run product creation processes.
<b>Testing</b>	- Does new/enhanced function perform as specified? - Are existing functions unaffected by changes? - Are performance benchmarks met?	- Are values within data products summarized accurately? - Do text strings within data products meet specifications?
<b>User Acceptance</b>	- Government verifies that function meets requirements.	- Government verifies the accuracy and correctness of data products.
<b>Deployment</b>	- Software is released to public, with associated database changes.	- Data products released to public.
<b>Operate/Maintain</b>	- Maintain system infrastructure and databases.	- Apply revisions to data and/or metadata as needed.

DADS support for a given data product may require multiple and overlapping passes through the system life cycle process. To demonstrate this concept, Figure C.4.4-1 traces a hypothetical data product to be tabulated and disseminated through the DADS system life cycle. This example assumes the following:

The product can be tabulated with no modification to the DADS tabulation application  
Product dissemination requires an enhancement to the DADS dissemination application

As the Figure C.4.4-1 shows, at least three passes through the system life cycle are required: (1) create the tabulated data, (2) enhance the dissemination application, and (3) create and disseminate data products based on the tabulated data. In this example, time constraints require that early testing outputs from tabulation operations be provided to the dissemination application development to support unit testing during the construction phase. (See Area A in Figure C.4.4-1.) Later, production outputs from tabulation operations, in concert with completion of the dissemination application functional enhancement, feed downstream dissemination operations. (See Areas B and C in Figure C.4.4-1.)



**Figure C.4.4-1 Example DADS System Life Cycle**

The Offeror **shall** describe, as a component of the technical approach, a system life cycle management approach describing at a high-level the Offeror's own system life cycle methodology, including anticipated modifications to conform to and support the DADS system life cycle methodology and DADS Business Operations. The Government requires a system life cycle methodology that is consistent with industry best practices. The Government does not intend to prescribe any particular system life cycle methodology. The Offeror **shall** propose deliverables that support the Offeror's system life cycle methodology. After contract award, the Contractor **shall** negotiate with the Government in the selection and inclusion of specific deliverables to the DADS II contract.

During Phase 1, Transition Planning, the Contractor **shall** observe, interface with, and work with the incumbent Contractor and the Government to gain in-depth knowledge of how the Government uses the system life cycle to organize and accomplish DADS work.

No later than the end of Phase 2, Transition, the Contractor **shall** deliver the Contractor's *System Life Cycle Management Plan*. The Contractor's *System Life Cycle Management Plan* **shall** be based on the Contractor's system life cycle management approach and tailored to reflect the in-depth knowledge of the legacy DADS system life cycle methodology. The Contractor's *System Life Cycle Management Plan* **shall** include the activities, roles, and responsibilities, work products, deliverables, resources, events, reviews, and reports of the Contractor's system life cycle management processes to be used in Phase 3, Production.

No later than nine (9) months after the end of Phase 2, Transition, the Contractor **shall** deliver a *DADS Business Operations Process Improvement Plan*. The *DADS Business Operations Process Improvement Plan* **shall** include, at a minimum, documentation and assessment of existing processes and recommendations for improvement.

The Government and the Contractor **shall** conduct a review and update as necessary the Contractor's *System Life Cycle Management Plan* as part of the annual proposal process to ensure the continued effectiveness of the Contractor's system life cycle management processes.

The operating unit performing the work for the DADS II contract **shall** receive an independent Standard Capability Maturity Model Integrated (CMMI) Appraisal Method for Process Improvement (SCAMPI) appraisal at Level 3 or higher for any of the version 1.1 or 1.2 models within 12 months after contract award. The DADS Program requires the Contractor to demonstrate performance at CMMI Level 3 or higher through triannual SCAMPI appraisals throughout the life of the contract.

#### **C.4.5 System Engineering and Architecture**

The DADS Program requires system engineering and architecture services to support program goals. During Phase 1, Transition Planning, the Contractor **shall** observe, interface with, and work with the incumbent Contractor and the Government to gain in-depth knowledge of the legacy DADS Program system architecture, the tools and models used to document that architecture, and the processes used to keep the architecture synchronized with the implementation of replacement systems and with evolving Census Bureau standards.

No later than nine (9) months after the end of Phase 2, Transition, the Contractor **shall** deliver a *DADS Architecture Model* that will define the architecture frameworks, tools, models, and processes that will be used to continue development and synchronization of the DADS architecture. At a minimum, the *DADS Architecture Model* **shall** include the following information: architecture overview, operational concept, connectivity and information exchanges, system interfaces, business and system data descriptions, business and systems event traces, system functionality descriptions, and standards profile. The *DADS Architecture Model* **shall** include interfaces to the Census Bureau's Enterprise Architecture (Go-To) (see Section J-15) and the 2010 Decennial Census Architecture (See Section J-16). In addition, the *DADS Architecture Model* **shall** include the information needed to populate the reference models of the Federal Enterprise Architecture Framework. The processes **shall** include mechanisms for keeping the DADS architecture synchronized with Census Bureau standards and for annual review of the architecture by the Government.

The Contractor **shall** develop the architecture to comply with Federal, Department of Commerce, and Census Bureau IT architecture requirements and IT standards related to the security and accessibility of and interface with Government systems and data. See Section J-6, *Census Bureau Published IT Standards*. The Contractor **shall** maintain accuracy, completeness, and consistency of the *DADS Architecture Model* throughout the period of performance.

The Contractor **shall** provide systems engineering services and content for the DADS Program that ensure requirements are met. The Contractor **shall** provide security analysis, implementation and testing, configuration and change management, performance and capacity management, and continuity of operations management according to the systems engineering plans. Services described in this section apply to the maintenance of the legacy DADS systems and the replacement systems.

#### **C.4.5.1 Infrastructure Maintenance**

The Government's *Change Management Strategy* (see Section J-8, *Change Management Strategy*) provides a vision of an overarching framework that describes the relationship and aspects of program, system, and infrastructure changes on the DADS Program (see Section C.5.14, *Change Management*). Aspects of program, system, and infrastructure changes including infrastructure management, configuration management, and incident management are described in Section C.5.14, *Change Management*.

The Contractor **shall** perform infrastructure maintenance activities, including hardware and software procurement, installation, systems administration, system upgrades, preventive and corrective maintenance, and configuration management. Infrastructure maintenance **shall** be performed on existing systems until system retirement and on replacement systems throughout its life cycle. The Contractor **shall** not be responsible for hardware and software maintenance of the legacy systems during Phase 1, Transition Planning and Phase 2, Transition. The Contractor **shall** assume that the incumbent Contractor will be responsible for all maintenance contracts during this time period.

The Contractor **shall** procure all hardware and software, including licensing and maintenance associated with DADS, with the exception of hardware and software purchased and maintained by the Census Bureau. The Government does not have a requirement to own any equipment included in the Contractor's solution. The Government is open to various ownership arrangements.

The Government does not have a requirement to have all work performed at a Census Bureau location. The Government will, make available contingent on the Contractor's solution, equipment and workspace for contractors working at a Census Bureau location. Offerors who propose to perform work at a Census Bureau site **shall** submit their requirements for Government Furnished Equipment with their proposal. The solution **shall** include all requirements for infrastructure and equipment, and all workspace and support equipment for co-located contractor personnel (including desktop PCs, supplies, and other equipment).

If the Contractor's solution indicates work is performed at a Census Bureau location, the Contractor **shall** install and administer all hardware, including servers, switches, and routers, that support the DADS architecture. The Contractor is not responsible for local area network (LAN) and wide area network (WAN) connectivity, firewalls, and other security items outside the DADS architecture, but **shall** work cooperatively with the Census Bureau when problems arise. The Government will provide user desktop PC support and manage the LAN and connectivity outside the DADS internal network.

The Contractor **shall** install and administer all software, including middleware, database engines, operating systems, development tools, and configuration management tools. The Contractor **shall** plan and execute any needed upgrades to the software and maintain licensing during the period of performance.

The Contractor **shall** maintain the hardware and software to keep various DADS systems available for use by developers and system end users. The Contractor **shall** address scheduling, resource requirements, equipment layout, and testing.

The Contractor **shall** perform, at a minimum, the following types of activities as appropriate:

- Corrective and preventive maintenance on hardware
- Reporting on planned and unplanned system events and activities
- Monitoring and reporting system availability, load, and system capacity
- Identification of requirements for hardware and software upgrades
- Scheduling and execution of regular system administration activities, including system reboot, backup, recovery, archiving, and restoration
- Installation of operating system, database, commercial-off-the-shelf (COTS) products, application development upgrades, and new releases
- Hardware and software configuration management

#### C.4.5.2 Technology Refresh

The Offeror **shall** describe, as a component of the technical approach, a technology refresh approach. The technology refresh approach **shall** describe the Offeror's strategy for planning for evolving technology and managing the implementation of new technology.

During Phase 1, Transition Planning, the Contractor **shall** observe, interface with, and work with the incumbent Contractor and the Government to gain in-depth knowledge of the state of technology of DADS systems.

No later than the end of Phase 2, Transition, the Contractor **shall** deliver the Contractor's *Technology Refresh Plan*. The Contractor's *Technology Refresh Plan* **shall** propose alternatives for technology refresh, provide recommendations, and describe benefits, risks, and trade-offs. The Contractor's *Technology Refresh Plan* **shall** address technology refreshment over the life of the DADS II contract. The Government and the Contractor **shall** conduct a review and update as necessary the Contractor's *Technology Refresh Plan* as part of the annual proposal process to ensure the technology continues to satisfy the DADS Program requirements.

#### C.4.6 Security

The scope of security for DADS is to secure all contract deliverables (e.g., systems, data, operating environments, processes) to ensure proper handling of United States Code Title 13 - Census information and to provide access to, and operation of, Government data and systems as required by the following mandates:

- Federal Information Processing Standard (FIPS) 140-2, <http://www.itl.nist.gov/fipspubs>
- National Institute of Standards and Technology (NIST) Special Publications 800-18, 800-30, 800-34, 800-37, and 800-63
- Department of Commerce IT Security Program Policy, <http://www.osec.doc.gov/cio/oipr/itsec/DOC-IT-Security-Program-Policy.htm>

- Census Bureau's IT Security Program Policies (see Section J-5, *Census Bureau IT Security Program Policies*)
- Federal Information Security Management Act (FISMA), <http://csrc.nist.gov/sec-cert>
- Homeland Security Presidential Directive/HSPD-12

These security directives may change over the period of performance as a result of the evolution of laws and policies stimulated by previous events and future events. The potential for new laws and policies or changes to laws and policies, although outside the control of the Census Bureau, may affect the scope and/or requirements of the DADS Program. Therefore, in the event that such a modification affects the DADS Program scope or requirements, the Contractor **shall** address these situations in the most cost-effective and efficient manner possible. If the Contractor elects to perform work at a non-Census site, the level of security **shall** be equal to the level of security afforded at Census sites.

The requirements defined as follows **shall** not eliminate any additional requirements specified in the previous mandates.

#### **C.4.6.1 Certification and Accreditation of Information Technology Systems**

The Offeror **shall** submit with the response to this solicitation a *Security Deliverables Schedule*. After contract award, the Government and the Contractor **shall** meet to negotiate the final *Security Deliverables Schedule*.

The Contractor **shall** obtain Certification and Accreditation (C&A) of the Contractor's technical approach prior to any processing of Census Bureau data (see J-11, Accreditation Flow Diagram). Certification must be obtained from the Chief of the Information Technology Security Office and the Department of Commerce Office of Security at the Census Bureau. Accreditation must be obtained from the Associate Director for Decennial Census. The C&A process is in keeping with NIST Special Publication 800-37. This process is documented in Section 3.4 of the Department of Commerce IT Security Program Policy located at <http://www.osec.doc.gov/cio/oipr/itsec/DOC-IT-Security-Program-Policy.htm>. The Government will guide the C&A process.

The Contractor **shall** be required to complete a C&A process for the development, testing, and production systems as outlined in Section J-5, *Census Bureau IT Security Program Policies*.

The Contractor **shall** work with the Government to determine the inspection schedule based on DADS schedule requirements and the availability of Government staff.

The Contractor **shall** complete and submit a *NIST Special Publication 800-26 Self-Assessment Questionnaire* on an annual basis. The Contractor **shall** deliver, maintain, and adhere to all security documentation required to fulfill security requirements, NIST 800-37, and the C&A processes for DADS systems.

On a date specified by the Government after contract award, the Contractor **shall** provide security plans that address all processes the Contractor will follow to ensure that DADS meets the security requirements necessary to receive accreditation and complies with NIST Special Publication 800-18.

On a date specified by the Government after contract award, the Contractor **shall** provide a *Continuity of Operations Plan* that addresses contingency planning and complies with NIST Special Publication 800-34. The Contractor **shall** provide documentation that is compliant with NIST SP 800-37 and NIST SP

800-53 and **shall** meet the system test and evaluation criteria for Census Bureau sensitive, but unclassified systems at the appropriate impact level in accordance with NIST FIPS 199.

In the event of any major changes to DADS systems, including changes in scope, the Contractor **shall** submit to re-certification and re-accreditation by the Census Bureau's IT Security Office.

#### **C.4.6.2 Federal Information Processing Standards Requirements**

The Contractor **shall** conform to NIST publications and Federal Information Processing Standards (FIPS) Special Publications pertaining to security.

The Contractor **shall** document how the DADS technical approach adheres to FIPS requirements. FIPS requirements for computer security appear at <http://www.itl.nist.gov/fipspubs>.

#### **C.4.6.3 Personnel Security**

Title 13, U.S.C., Section 23(c) permits the Government to use non-Government personnel to perform the work authorized under this title but only if they are sworn to observe the limitations imposed by Section 9 of this title.

All DADS II Contractor personnel are required to take the Census Bureau Title 13 Oath of Nondisclosure (BC-1759, Special Sworn Status) to receive Special Sworn Status (SSS) before they are given access to Title 13 information. A designated Census Bureau employee will administer the Oath. A Notary Public may administer the Oath if a designated Census Bureau employee is not available.

All Contractor personnel **shall** renew their SSS with the Census Bureau on an annual basis. All Contractor personnel **shall** be subject to penalties for unlawful disclosure of Title 13 information.

All Contractor personnel with access to Title 13 information **shall** complete an annual Title 13 Security Awareness Course provided by the Census Bureau's Policy Office. All Contractor personnel with access to IT resources **shall** complete an annual IT Security Awareness Course provided by the Census Bureau's IT Security Office.

The Contractor **shall** prohibit its personnel and sub-contractor personnel from working or visiting DADS-related facilities until the Government conducts, and personnel pass, a favorable pre-employment background investigation. Individuals who have a completed, favorable recent background investigation by another Government agency, which meets Department of Commerce requirements and which can be verified by the Department's Office of Security, do not require a pre-employment background investigation. The date and type of investigation and a verification contact must be provided to the Department of Commerce Office of Security for verification and confirmation.

All Contractor and sub-contractor personnel, including project supervisors and managers, **shall** provide all required information and pass the Government's suitability clearance, under Homeland Security Presidential Directive 12 (HSPD-12) and DOC policy, prior to performing work on the DADS II contract.

The Contractor **shall** submit paperwork for new DADS employees at least six (6) calendar weeks before they are scheduled to commence work under this contract. No Contractor personnel will be permitted to perform onsite on the DADS contract until issued a clearance by the Government. It can take up to one month for contractor personnel to receive clearance and an additional week to receive building access authorization, work space, desktop computer and network access once the paperwork has been submitted

to the security office. Necessary forms will be furnished by the Government and will be made available to the Contractor as needed during the period of performance.

#### **C.4.6.4 Foreign Nationals**

Contractor personnel who are not U.S. citizens are subject to the same security processing as any other Contractor. Non-U.S. citizens however are required to reside in the United States for at least two (2) years prior to the submission of clearance forms.

The Contractor **shall** not employ or use any foreign nationals who do not comply with Commerce Acquisition Regulation (CAR) 1352.237-72 and who have not legally resided in the United States for the past two (2) years.

The Contractor **shall** submit clearance forms only for foreign nationals who have resided in the United States for two (2) years preceding submittal of the forms. The Government reserves the right to change policies related to foreign nationals, and the Contractor **shall** adhere to such changes.

Foreign nationals who have resided in the United States for two (2) years preceding employment **shall** be granted access to Title 13 data only after providing all necessary forms including Immigration and Naturalization Service documentation and obtaining a security clearance. However, these foreign nationals **shall** not be allowed in any Government-designated restricted areas.

The Contractor **shall** prohibit foreign nationals from: accessing Government-designated restricted areas, assuming administrative or policy-forming responsibilities for any DADS-related work, assuming security-related positions (e.g., security management or oversight, guards, or security guard or security officer positions in any DADS-related facility); accessing classified (national security) information, and accessing restricted areas (e.g., computer rooms, telecommunication centers) in any DADS-related facility.

#### **C.4.6.5 Commerce Acquisition Regulation Compliance**

The following IT security clauses are required for all contracts for services involving IT in which physical and/or electronic access to Department of Commerce information is needed. (See the November 17, 2003 memorandum from the Deputy Director for Acquisition, Christine A. Makris, Subject: Information Technology Security Clauses.)

The Contractor **shall** fully comply with CAR 1352.237-72 (see Section I, Security Processing Requirements For Contractor/Subcontractor Personnel Working On A Department Of Commerce Site, for a copy of this regulation).

This contract has been classified as “moderate risk” in accordance with Commerce Acquisition Manual (CAM) 1337.70. Under the DADS II contract, the Government anticipates differing levels of performance risk based upon the specific functions performed under the contract. Accordingly, the Department of Commerce has granted a deviation to CAM 1337.70 to allow the Census Bureau to require Contractor personnel security clearance checks based upon the function performed by these personnel under the DADS II contract. The Contractor **shall** fully comply with CAR 1352.239-74 and screen all Contractor personnel in accordance with this regulation based upon their risk-level category. (See Section I, *Security Processing Requirements For Contractors/Subcontractors Personnel For Accessing DOC Information Technology Systems*, for a copy of CAR 1352.239-74). Failure of the Contractor to comply with the requirements of this section may result in termination of this contract or removal of some Contractor personnel from DOC facilities. Compliance with these requirements **shall** not be construed by

the Contractor as having the ability to provide its personnel with clearance to access classified information.

The Contractor **shall** comply with CAR 1352.239-73- Security Requirements For Information Technology Resources (OCT 2003) (See Section I.10).

#### **C.4.6.6 Information Technology Security**

The Contractor **shall** monitor and confirm that all delivered systems/equipment/products that may have contained Title 13 data during their operational life are degaussed or otherwise sanitized so that Title 13 data are unrecoverable in whole or in part. The process used **shall** be in compliance with applicable Government regulations and guidance. Encrypted Title 13 data on any device or encrypted Title 13 data on any removable media **shall** be handled and tracked as if they are unencrypted Title 13 data.

The Contractor **shall** use all means available to provide security for Government-owned source code and data.

Government-owned source code and data, which becomes available to the Contractor under the terms in this Performance Work Statement, **shall** be restricted to the uses necessary to ensure proper functioning DADS systems, and **shall** not be disclosed or used for any other purpose without the prior written permission of the Contracting Officer. These restrictions **shall** not apply to material currently published and presently in the public domain or material obtained by the Contractor about DADS systems independent of the Government.

The Contractor **shall** be responsible for making regular backups, on a schedule approved by the Government, of all computer data that support DADS applications, systems, and data.

The Contractor **shall** have the responsibility to implement appropriate IT (e.g., network access, database access). The Contractor **shall** establish and implement backup and recovery procedures for DADS. The Contractor **shall** administer an effective backup and recovery program, including offsite storage and retrieval from storage facilities, consistent with Census Bureau operating procedures, regulations and the requirements of this Performance Work Statement.

The Contractor **shall** periodically test the established backup and recovery procedures and backup system components in accordance with backup schedules. The Contractor **shall** maintain the backup library in accordance with retention cycles and, if needed, execute recovery procedures.

On a date specified by the Government after contract award, the Contractor **shall** develop and implement disaster recovery plans and test the plans for the DADS Program.

The Contractor **shall** establish and implement network administration procedures to provide access controls and user ID and password integrity.

#### **C.4.6.7 Security Performance Requirements**

The Contractor **shall** propose a process, in the Contractor's security plans, to secure DADS systems and data in accordance with the requirements of this Performance Work Statement. This process **shall** include the specific metrics to be gathered, with recommended threshold limits for alarm and corrective actions, to support the maintenance of full security for DADS systems and data.

### C.4.7 Replacement of DADS Systems

The Government recognizes that DADS tabulation and dissemination systems are approaching obsolescence. Therefore, this solicitation requires the Contractor to provide replacement of existing systems to form an integrated solution. The replacement systems **shall** include new infrastructure hardware and software and new applications for tabulation and dissemination. The Government does not intend to prescribe any particular system life cycle methodology for the replacement of systems.

The Government does require an initial, high-level integrated design for the replacement of all systems. The integrated design **shall** be sufficiently scalable and flexible to include the replacement of the Ad Hoc Tabulation capability (see Section C.6, Option for Ad Hoc Tabulation Replacement) should the Government exercise the option. The Government requires the incremental construction (including hardware and software procurement), testing, and deployment of systems so that the replacement functionality coincides with the DADS Program business needs (i.e. the tabulation functionality is required prior to dissemination functionality). (See Table 4.7-1 Incremental Deployment of Replacement Functionality.) The incremental development and deployment of replacement systems **shall** provide functionality in increments, not delay functionality until the entire replacement system is complete, incorporate lessons learned from previous incremental deployments, and support the leveling of Government expenditures across a number of fiscal years.

**Table C.4.7-1 Incremental Deployment of Replacement Functionality**

Task	Earliest Start Date	Latest Finish Date
Replacement Systems Planning	Start of Phase 2, Transition	June 30, 2012
Tabulation System Replacement	July 1, 2008	June 30, 2011
Dissemination System Replacement	October 1, 2008	September 30, 2010

The Offeror **shall** describe the approach to replacement of the legacy DADS systems. The Offeror's **shall** technical approach **shall** describe at a minimum, the incremental replacement of systems, proposed architecture, work products, deliverables, resources, and a schedule of events and milestones. The approach to system replacement **shall** describe an initial, high-level, integrated design for the replacement systems, support the incremental deployment of replacement functionality, and be consistent with the Offeror's system life cycle methodology. The Offeror's approach to system replacement **shall** not include the approach to ad hoc tabulation replacement (see Section C.6 Option for Ad Hoc Tabulation Replacement), which **shall** be included as part of the option. The approach to system replacement **shall** consider the potential Ad Hoc Tabulation Replacement in the high level, integrated design.

During Phase 1, Transition Planning, the Contractor **shall** observe, interface with, and work with the incumbent Contractor and the Government to gain in-depth knowledge of the DADS Program replacement system requirements.

The Contractor **shall** deliver the Contractor's *Plan for System Replacement* with the Contractor's proposal for Option Year 2. The Contractor's *Plan for System Replacement* **shall** be based on the Contractor's approach to system replacement and tailored to reflect the Contractor's in-depth knowledge of the DADS Program replacement system requirements. The Contractor's *Plan for System Replacement* **shall** update,

as necessary, the integrated design for the replacement systems and describe the incremental construction (including hardware and software procurement), testing, and deployment of systems. The Contractor's *Plan for System Replacement* **shall** include a schedule of events and milestones for system replacement and include the activities, roles and responsibilities, work products, deliverables, resources, events, reviews, and reports to be used in system replacement during Phase 3, Production. The Contractor's initial *Plan for System Replacement* **shall** not include the Option for Ad Hoc Tabulation Replacement.

The Government and the Contractor **shall** conduct a review and update, as necessary, the Contractor's *Plan for System Replacement* as part of the annual proposal process.

The Contractor's proposed replacement systems **shall** satisfy all the requirements stated in the SRD (see J-1, *System Requirements Document*) and this Performance Work Statement. Transition from existing systems to replacement systems **shall** be accomplished with minimal disruption to the Government's Business Operations. The Contractor's proposed replacement systems **shall**:

- Improve economies and efficiencies
- Ensure that data offered on legacy DADS systems are continually available to customers
- Include documentation on the proposed physical and logical architecture
- Include training materials and an adequate help function
- Include, in the *Plan for System Replacement*, (1) the cutover process from a legacy to a proposed replacement system, (2) the transition of data from a legacy to a proposed replacement system, and (3) the eventual retirement of the legacy DADS system
- Maximize the use and reuse of COTS software products for the replacement systems
- Lay the groundwork for an integrated Census Bureau Web presence
- Demonstrate the Contractor's awareness of technology advances
- Identify risks, challenges and mitigations related to transition from the legacy system to a proposed replacement system
- Include creative, user-friendly ways to present complex data
- Be scaleable and flexible, with the ability to support tabulation and dissemination for additional censuses and surveys

The Government prefers replacement systems that follow the Census Bureau Enterprise Architecture (Go-To) (See Section J-15, Census Bureau Enterprise Architecture (Go-To)). The Government is open to solutions that provide the greatest efficiencies for its business processes. The Government views a replacement systems architecture that does not follow the Census Bureau Enterprise Architecture (Go-To) as offering a greater risk to the Government. A proposed architecture that is not in compliance with the Census Bureau Enterprise Architecture (Go-To) must clearly demonstrate the benefits in terms of risk reduction, performance improvement, or cost reduction.

#### C.4.7.1 Replacement Systems Planning

The Contractor **shall** begin planning activities for the replacement of all systems no earlier than the start of Phase 2, Transition and **shall** continue planning activities through the completion of deployment of all replacement systems. The planning activities **shall** include system life cycle activities and be consistent with the Contractor's system life cycle methodology. The Contractor **shall** describe, in the Contractor's *Plan for System Replacement*, the integrated design for the replacement system and the incremental construction (including hardware and software procurement), testing, and deployment of systems. The Contractor's *Plan for System Replacement* **shall** support the deployment of functionality in increments and the leveling of Government expenditures across a number of fiscal years. The Contractor's *Plan for System Replacement* **shall** include a schedule of events and milestones for system replacement and

include the activities, roles and responsibilities, work products, deliverables, resources, events, reviews, and reports to be used in system replacement during Phase 3, Production.

The Contractor **shall** deliver the Contractor's *Plan for System Replacement* with the Contractor's proposal for Option Year 2. The Contractor **shall** update, as necessary, the Contractor's *Plan for System Replacement* to incorporate lessons learned from previous incremental deployments, maintain the integrated design for the replacement of all systems, and adapt, as necessary, to the Government's business needs.

#### **C.4.7.2 Tabulation System Replacement**

The Contractor **shall** begin activities for the replacement of the tabulation system no earlier than July 1, 2008 and complete activities no later than June 30, 2011. The Contractor **shall** perform activities for the incremental construction (including hardware and software procurement), testing, and deployment for the replacement of the tabulation system in accordance with the Contractor's *Plan for System Replacement*. The replacement activities **shall** include system life cycle activities and be consistent with the Contractor's system life cycle methodology. The tabulation system replacement **shall** satisfy the requirements for tabulation and all relevant requirements as stated in the SRD (see J-1, System Requirements Document) and this Performance Work Statement.

Transition from the legacy tabulation system to the replacement tabulation system **shall** be accomplished with minimal disruption to the Government's Business Operations and provide improved economies and efficiencies in tabulation. The incremental development and deployment of the replacement tabulation system **shall** provide functionality in increments, not delay functionality until the entire replacement system is complete, and allow for the incremental retirement of the legacy tabulation system (i.e., the replacement functionality for the tabulation of SF1 will be implemented prior to the functionality for the tabulation of SF2).

#### **C.4.7.3 Dissemination System Replacement**

The Contractor **shall** begin activities for the replacement of dissemination systems no earlier than October 1, 2008 and complete activities no later than September 30, 2010. The Contractor **shall** perform activities for the incremental construction (including hardware and software procurement), testing, and deployment for the replacement dissemination system in accordance with the Contractor's *Plan for System Replacement*. The replacement activities **shall** include system life cycle activities and be consistent with the Contractor's system life cycle methodology. The dissemination system replacement **shall** satisfy the requirements for dissemination and all relevant requirements as stated in the SRD (see J-1, System Requirements Document) and this Performance Work Statement.

Transition from the legacy dissemination system to the replacement dissemination system **shall** be accomplished with minimal disruption to the Government's Business Operations and provide improved economies and efficiencies in dissemination. The incremental development and deployment of the replacement dissemination system **shall** provide functionality in increments, not delay functionality until the entire replacement system is complete, and allow for the incremental retirement of the legacy dissemination system.

### **C.5 PROGRAM MANAGEMENT**

Program Management provides the Contractor and the Government with the processes and tools necessary to effectively manage the work performed.

The Contractor **shall** manage all tasks in a manner that enables DADS goals and objectives to be met within the schedule, cost, scope, and technical baselines. The Contractor **shall** provide management, administration, and documentation of DADS, including providing staff, equipment, processes, procedures, training, and management necessary to initiate, execute, control, status, secure, and close out the functions required by this Performance Work Statement.

The Offeror **shall** submit with the response to this solicitation a *Program Management Plan (PMP)* that describes the Offeror's overall management approach. The PMP **shall** describe the Offeror's management approaches to the subsections identified in Section C.5, including the Offeror's approach to managing Key Personnel. After contract award, the PMP serves as the Contractor's overall approach to program management and will contain references to the specific plans called for in the following subsections. The Offeror's PMP **shall** constitute Volume III of the proposal as described in Section L. Key Personnel resumes **shall** be included in Volume V. The following **shall** be included as attachments to the PMP:

- *Plan for Phase I, Transition Planning*
- *CWBS*
- *Master Project Schedule*
- *Organizational Breakdown Structure,*
- *CWBS Dictionary,*
- *Performance Measurement Baseline*
- *Responsibility Assignment Matrix*
- *Risk Register*
- *Subcontracting Plan*

The Government and the Contractor **shall** conduct a review and update as necessary the Contractor's *PMP* as part of the annual proposal process.

The remainder of this section addresses key areas within Program Management.

#### **C.5.1 Annual Proposal Process**

On an annual basis, the DADS Program will provide the Contractor with a Request for Proposal, including a Performance Work Statement. The Annual Performance Work Statement will definitively state the requirements for the upcoming option period. The annual proposal process is a collaborative effort between the Government and the Contractor, which includes up-front planning activities, open communications and interim reviews.

The Contractor **shall** submit on an annual basis to the Government a cost and technical proposal based on the Performance Work Statement. The schedule for the annual proposal process will be jointly agreed upon after contract award. The annual proposal process **shall** include the review and, if necessary, the update and resubmission of the following documents:

- Requirements Development and Management Plan
- Requirements Traceability Matrix (RTM)
- System Requirements Specification (SRS)
- System Life Cycle Management Plan
- Technology Refresh Plan
- Program Management Plan (PMP)

- DADS Documentation List
- Contractor Work Breakdown Structure (CWBS)
- Master Project Schedule
- CWBS Dictionary
- Performance Measurement Baseline
- Organizational Breakdown Structure
- Responsibility Assignment Matrix
- Quality Management Plan
- Risk Management Plan
- Change Management Plan
- Performance Measurement Plan

These documents **shall** be maintained on an on-going basis and **shall** integrate and complement the Government's version of the document where applicable.

### C.5.2 Communication with the Government

The Contractor **shall** establish and maintain effective communication with the Government. Communications between DADS and the Contractor **shall** utilize both informal and formal forms to maintain timeliness and efficiency of actions. The Contractor **shall** structure the DADS effort in a manner that ensures that the Contractor's goals and objectives are synchronized with those of the Government and reflect the attributes of a partnership through an open, customer-oriented effort.

With the Government's approval, the Contractor may interact with a wide range of DADS stakeholders, including Census Bureau executives, management, and subject matter and technical staff and organizations outside the Census Bureau, (e.g., 2010 Census oversight groups).

The Contractor **shall**:

- Deliver an updated *DADS Documentation List* on an annual basis.
- Work collaboratively with Government subject matter, technical, statistical, geographic, systems, and security staff to ensure that all deliverables and work products meet Government requirements.
- Provide an *Issues and Problems Report* that describes the impact to cost, schedule, quality, and technical baselines and recommends solutions. The timing and content of this report will be jointly agreed upon after contract award.
- As necessary, submit a *Program Change Request (PCR)* in accordance with DADS Program Change Management processes and requirements (see Section C.5.14, *Change Management*).
- As directed by the Contracting Officer or the Contracting Officer's Technical Representative, coordinate efforts with the Government and other Census Contractors to ensure the success of DADS.

#### C.5.2.1 Program Management Reviews and Other Meetings

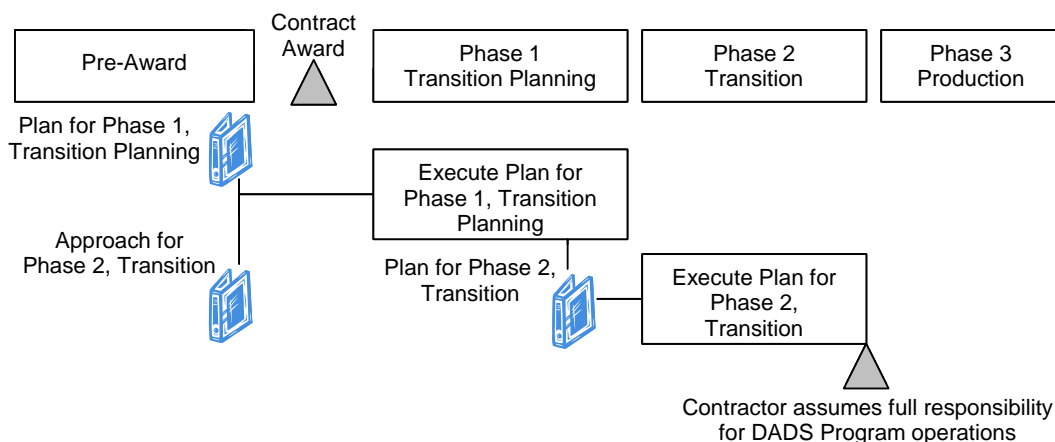
The purpose of the Program Management Review (PMR) is to communicate status, risks, schedules, costs, earned value, and issues to a broad-based audience, including DADS Program management, other Census Bureau managers, and oversight organizations. On a date specified by the Government after contract award, the Contractor **shall** present the first PMR. PMRs **shall** be conducted by the Contractor and held on a monthly basis for the duration of the contract. In accordance with the Contractor's

program management discipline, the Contractor **shall** work cooperatively with the Government to establish the format of the meetings.

The Contractor **shall** also conduct a weekly Program Management Meeting (PMM) with the Government. In addition, to facilitate collaboration, other meetings driven by either schedule or events and initiated by the Government or requested by the Contractor may occur. Such meetings may include Change Control Board, coordination, and status meetings. The content of the weekly PMM and other meetings **shall** be negotiated after contract award.

### C.5.3 Contract Transition

The Government requires a transition period during which the responsibilities for maintaining, enhancing, and operating the DADS System transfers from the incumbent to the Contractor. The Government, incumbent, and Contractor must work collaboratively to ensure a successful transition with minimal disruption to Government operations. A three-phased approach to transition is depicted in figure C.5.3-1.



**Figure C.5.3-1 Contract Transition**

The Contractor **shall** perform the transition activities required to assume full responsibility for all functions for the DADS Program from the incumbent with minimal disruption to Government operations. The Government, incumbent, and Contractor **shall** work collaboratively to ensure a successful transition. Descriptions of pre-award and contract phases, identified in Section C.3, *Contract Scope*, follow.

#### Pre-Award

The Offeror **shall** submit with the response to this solicitation a *Plan for Phase 1 – Transition Planning* that describes the transition planning activities the Offeror proposes to undertake during the Phase 1, Transition Planning. The *Plan for Phase 1 – Transition Planning* **shall** include a schedule of events and milestones for transition planning activities. The Offeror **shall** describe, as a component of the PMP, an approach for Phase 2, Transition that describes the Offeror's activities required for a successful transition of responsibilities to the Contractor including incremental assumption of responsibilities. The Offeror **shall** submit with the response to this solicitation, a Risk Register (See Section C.5.13) containing potential risks with risk mitigation strategies associated with Phase 1, Transition Planning.

### Phase 1, Transition Planning

The Contractor **shall** meet with the incumbent Contractor and the Government on a date specified by the Government to launch Phase 1, Transition Planning phase of the DADS II contract. During Phase 1, Transition Planning, the Contractor **shall** observe, interface with, and work with the incumbent Contractor and the Government to gain in-depth knowledge of and familiarity with DADS systems, including the following products and artifacts: data tabulation and dissemination artifacts produced by the applications, physical and logical architectures, functional and non-functional requirements, COTS hardware and software, custom software and scripts, configuration and administration requirements, operating parameters, and maintenance requirements.

No later than ninety (90) days after the notice to proceed, the Contractor **shall** deliver the detailed *Plan for Phase 2, Transition*. The *Plan for Phase 2, Transition* **shall**, at a minimum, include the transition activities, work products, deliverables, resources, and schedules for Phase 2, Transition.

The *Plan for Phase 2, Transition* **shall** describe how and identify when responsibility and accountability for Business Operations transfers from the incumbent to the Contractor. The Contractor **shall** address in its *Plan for Phase 2, Transition* the Government and Contractor's hardware and software inventory transfer. The Contractor **shall** provide, as a component of the *Plan for Phase 2, Transition*, a schedule of transition events and milestones and indicate incremental assumption of responsibilities. The *Plan for Phase 2, Transition* **shall** identify risks with risk mitigation strategies associated with Phase 2, Transition.

The Contractor **shall** complete all work required for Phase 1, Transition Planning no later than 90 days after the notice to proceed on the DADS II contract. Phase 1, Transition Planning will be considered complete upon the review and acceptance by the Government of the following deliverables:

- Plan for Phase 2, Transition
- Staffing Plan
- Earned Value Management Plan
- Risk Management Plan\*

### Phase 2, Transition

Upon Government review and approval of the *Plan for Phase 2, Transition*, the Contractor **shall** implement, execute, manage, and control the activities identified in the *Plan for Phase 2, Transition*. The intent of Phase 2, Transition, is to efficiently, effectively, and incrementally transfer responsibility from the incumbent to the Contractor. The Contractor **shall** provide properly trained, qualified, and/or certified personnel prior to assuming responsibility for each function. Phase 2, Transition **shall** be completed no later than six (6) months after the end of Phase 1, Transition. The Contractor **shall** assume full responsibility for all functions, processes and equipment for the DADS Program no later than the end of Phase 2, Transition.

### Phase 3 – Production

The Contractor **shall** be responsible for all activities described in this Performance Work Statement including replacement of the DADS Systems.

#### **C.5.4 Work Breakdown Structure and Master Project Schedule**

The Government requires the use of a product-oriented WBS as the core of program control and scope management. The WBS comprises two major parts: (1) the *Program Work Breakdown Structure* (PWBS) and (2) the *Contractor Work Breakdown Structure* (CWBS). The PWBS will be created to support the CWBS after contract award and after the Contractor and the Government reaches agreement. The

Government will prepare the PWBS. On an annual basis the Government and the Contractor **shall** review and may revise the CWBS or PWBS.

The Offeror **shall** submit with the response to this solicitation the CWBS that represents the scope of work to be performed by the Contractor in the delivery of the technical approach. The Offeror **shall** prepare the CWBS at a level that demonstrates that the Offeror has a clear understanding of the work to be performed. The CWBS **shall** be prepared at a minimum, to the third level. On a date specified by the Government after contract award, the Contractor **shall** meet with the Government to review and, if necessary, restructure the CWBS. The Government and the Contractor **shall** conduct a review of the CWBS as part of the annual proposal process to ensure the continued effectiveness of the WBS. The Contractor **shall** develop, deliver, maintain, and adhere to a detailed product-oriented CWBS for its management of the DADS II contract.

The CWBS **shall** be further integrated into a *Master Project Schedule*, which the Government and the Contractor will use as a project management tool that ties technical, cost, scope, and schedule baselines into a performance-based, Earned Value Management System (EVMS) (See Section C.5.5, *Earned Value*). The Contractor **shall** develop, deliver, and maintain an integrated *Master Project Schedule* that ties to the CWBS. The *Master Project Schedule* **shall** include a unique CWBS identifier for each schedule entry or milestone.

The Offeror **shall** submit with the response to this solicitation the Contractor's *Master Project Schedule*. On a date specified by the Government after contract award, the Contractor **shall** meet with the Government to review and, if necessary, restructure the *Master Project Schedule*. The Government and the Contractor **shall** conduct a review of the *Master Project Schedule* as part of the annual proposal process to ensure the continued effectiveness of the *Master Project Schedule*. The *Master Project Schedule* will contain detailed planning for fiscal year 2007 and high-level planning for the remainder of the contract period.

The Contractor **shall** have the capability to provide to the Government schedule updates based on the CWBS in a file format that is compatible with Microsoft Project®. The details regarding the frequency of schedule updates and file content **shall** be negotiated upon contract award.

The Contractor **shall** develop, deliver, maintain, and adhere to *CWBS Dictionary* that describes what is in each CWBS element. The Contractor **shall** provide the Government with updates to the *CWBS Dictionary* as changes occur within the CWBS.

The Offeror **shall** submit with the response to this solicitation the *CWBS Dictionary*. On a date specified by the Government after contract award, the Contractor **shall** meet with the Government to review and, if necessary, update the *CWBS Dictionary*. The Contractor **shall** maintain and adhere to *CWBS Dictionary* that describes what is in each CWBS element. The Contractor **shall** provide the Government with updates to the *CWBS Dictionary* as changes occur within the CWBS.

The Contractor **shall** develop and maintain a *Performance Measurement Baseline* against which program performance can be measured throughout the life of the contract. A new *Performance Measurement Baseline* covering each option period **shall** be submitted with the annual proposal covering the relevant option period. The Contractor **shall** minimize the use of level-of-effort cost accounts to the greatest extent practical in the development of the *Performance Measurement Baseline* and the CWBS Structure.

The Offeror **shall** submit with the response to this solicitation the *Performance Measurement Baseline* covering Phase 1, Transition Planning. During Phase 1, Transition Planning, the Contractor **shall** develop the *Performance Measurement Baseline* for Phase 2, Transition. On a date specified by the Government after contract award, the Contractor **shall** meet with the Government to review and, if necessary, update the *Performance Measurement Baseline* for Phase 1, Transition Planning.

The Offeror **shall** submit with the response to this solicitation the *Organizational Breakdown Structure* and the *Responsibility Assignment Matrix*. The Offeror **shall** deliver an *Organizational Breakdown Structure* that integrates with the proposed CWBS. The Offeror **shall** also deliver a *Responsibility Assignment Matrix*, which integrates the CWBS and the *Organizational Breakdown Structure*. On a date specified by the Government after contract award, the Contractor **shall** meet with the Government to review and, if necessary, update the *Organizational Breakdown Structure* and the *Responsibility Assignment Matrix*.

### C.5.5 Earned Value

Earned Value (EV) is a program management technique that integrates technical performance requirements and resource planning with schedules, while taking risk into consideration. The major objectives of applying EV to a contract are to encourage the Contractor to use effective internal technical, cost, and schedule management control systems and to provide the Government with accurate and timely data produced by these systems for better management insight. These data, in turn are used for determining product-oriented contract status, and projecting future performance based on trends to date. In addition, EV enables better and more effective management decision making to minimize adverse impacts to the project.

The Contractor **shall** employ EV methodology on the DADS II contract following ANSI/EIA Standard 748-98. The Contractor **shall** use an EVM System that is ANSI 748-98 compliant. The Contractor **shall** integrate EV metrics from all subcontractors into the Contractor's EVMS.

After contract award, the Contractor **shall** generate a monthly and cumulative *Contract Performance Report (CPR)* for the CWBS. The level of reporting **shall** be jointly determined with the Government after contract award based on the Contractor's CWBS. The Contractor **shall** establish a reporting level of the CWBS that provides Government visibility into the Contractor's detailed milestones and the status of deliverables and products for the DADS II contract. The Government will use this information for performance measurement and tracking of status.

The Contractor **shall** deliver *CPR* formats 1, 2, 3, 4, and 5 with one (1) cover sheet. The Contractor **shall** deliver the *CPR* by the 15<sup>th</sup> of each month for the current reporting month (i.e. previous month) and cumulative period. The Contractor's *CPR* **shall** also reflect all subcontractors' EV metrics for both the current and cumulative periods. The Contractor **shall** show, using the *CPR*, current and cumulative variances, report on the reasons for these variances, and describe corrective actions as required. The current and cumulative variance thresholds will be negotiated after contract award. The Contractor **shall** have the capability to provide the Government with a wInsight<sup>®</sup> (the Census Bureau's EV software tool) file each month, to be delivered with the *CPR*. The Contractor **shall** use the guidelines in the Defense Acquisition Guidebook, including the appendices, to establish cost reporting requirements for subcontractors on the DADS II contract. The Contractor **shall** also deliver a *Baseline Maintenance Log* detailing all changes or modifications to the EV baseline during the reporting period.

No later than the end of Phase 1, Transition Planning, the Contractor **shall** submit an *EVMS Plan* that describes the EV methodology, a description of the EVM system, and, if necessary, a revised CWBS.

The Contractor **shall** review and update as necessary the *EVMS Plan* as part of the annual proposal process.

The Contractor **shall** prepare and conduct an Integrated Baseline Review (IBR) within one (1) month of the start of each Option Period for the duration of the contract. The purpose of the IBR is to allow the Government to review the Contractor's PMB for appropriate scheduling, budgeting and EV management at the agreed upon WBS level. The IBR **shall** consist of a detailed review of the PMB to ensure the PMB captures the technical scope, schedule requirements, and resources required to complete the work for the current Option Year. The Contractor's Program Manager and the Contractor's lead staff that is responsible for oversight of the WBS elements under review should conduct the IBR.

#### **C.5.6 Financial Reporting**

The Contractor **shall** provide *DADS Financial Reports* as required (at least twice annually) to support the Government's budget process. The Contractor **shall** provide separate financial reports on paper and electronically, via email, in a format determined jointly with the Government after contract award. The Contractor's financial reports **shall** include the financial information from the previous reporting period and cumulative financial information. The Government will provide the detailed requirements for these reports after contract award.

On a date specified by the Government after contract award, the Contractor **shall** meet with the Government to review the Government's financial reporting requirements. These requirements include reporting financial information by maintenance and operations activities, enhancement activities, data product, and Contract Line Item Number (CLIN). The Contractor **shall** deliver financial reports that enable the Government to fulfill the Government's financial reporting requirements.

The Contractor **shall** generate a *Contract Funds Status Report*, DD Form 1586, to be delivered quarterly (January 15, April 15, July 15, and October 15).

#### **C.5.7 Monthly Status Reports**

The Contractor **shall** submit a written Monthly Status Report on a date to be determined by the Government for the previous month's activities. The report **shall** at a minimum contain the following information:

- The Contract Number and reporting period
- Period of Performance
- A summary of the technical work specifying the following:
  - A narrative review of work accomplishments and/or significant events for the month
  - Problems, root cause analysis (if necessary), and solutions (including impacts on quality, schedule, and cost)
- Percentage of work completed toward interim or final deliverables and estimates of time to complete deliverables
- Major activities planned for the next month
- Monthly and cumulative contract dollars spent to date
- Funds remaining
- Program issues and high-level risks including, the areas of program management, facilities, equipment, staffing, and funding
- Status and progress of 508 compliance
- Maintenance issues, maintenance risks, and mitigation activities and/or plans
- Security issues, security risks, mitigation activities, and/or plans

After contract award, the Contractor and the Government will jointly determine the format of the report including dashboard presentations of key performance indicators and the full contents of the report. The report **shall** include measurements and metrics for regular reporting as well as performance baselines/standards for these measurements.

### C.5.8 Key Personnel

The qualifications, availability, and commitment of Key Personnel are important to the Government. The Offeror **shall** submit with the response to this solicitation information on Key Personnel with experience relevant to the DADS Program. A strong team of available personnel with combined expertise in all aspects of technical requirements, business management, and program management is required. Proposal instructions regarding the submission of Key Personnel resumes and information appear in Section L.16.2.8, Key Personnel.

The Contractor's Key Personnel **shall** possess the skills and experience necessary to perform, at a minimum, the following functions:

- Program Management
- IT Security Management
- Quality Management
- System Architecture Management
- System Development Management
- Requirements Management
- Financial Management
- Business Operations Management

The Offeror may propose other personnel, from itself, teaming partner(s), or its subcontractor(s), as Key Personnel. The final designation of Key Personnel will be negotiated after contract award. The Contractor's Key Personnel for the DADS II contract are subject to the Key Personnel provisions of Section H.5.

### C.5.9 Staffing

The Contractor's ability to draw upon its broader human capital resources to support the DADS Program is important to the Government. The Offeror **shall** describe, as a component of the PMP, a staffing approach that describes how the Offeror's policies and processes for recruiting, hiring, training, retaining and assigning staff, and managing human resource levels (i.e., ramp-ups and ramp-downs) will fulfill project staffing requirements, while ensuring that staff skills are maintained.

No later than ninety (90) days after the notice to proceed, the Contractor **shall** deliver the Contractor's *Staffing Plan*. The Contractor's *Staffing Plan* **shall** be based on the staffing approach and **shall** identify the Contractor's proposed personnel and the Contractor's source of personnel (e.g. current resources, hires from the incumbent, new hires, subcontractor resources) for Phase 2, Transition and Phase 3, Production.

The qualifications of the proposed staff proposed for Phase 1, Transition Planning, are important to the Government. The Government requires the Contractor's initial staff to possess the skills, experience, and education to effectively and collaboratively work with the incumbent Contractor and the Government to gain in-depth knowledge of and familiarity with DADS systems to ensure a successful transition with minimal disruption to Government operations. The Offeror **shall** identify and submit with the response to

this solicitation resumes for the initial staff for Phase 1, Transition Planning, (if different from Key Personnel). Submitted resumes **shall** not exceed three (3) pages for each initial staff member and **shall** describe skills, experience, and education relevant to Phase 1, Transition Planning. The resumes **shall** contain the following information on each candidate:

- Years of relevant experience and skill sets in relevant fields
- Recognition in his or her field
- Relevant published papers including a full bibliographical reference
- Degrees and certifications relevant to the proposed work

The qualifications of the potential staff for Phase 2, Transition and Phase 3, Production are important to the Government. The Government requires the Contractor's staff to possess the skills, experience, and education to effectively perform the work of Phase 2, Transition, and Phase 3, Production. The Offeror's PMP **shall** address the approach to staffing Phase 2, Transition and Phase 3, Production.

#### **C.5.10 Subcontracting**

It is the Census Bureau's goal to assist the Department of Commerce in meeting or exceeding its small business goals. Therefore, the Offeror **shall** submit with the response to this solicitation a *Subcontracting Plan* that includes a subcontract participation plan. The *Subcontracting Plan* **shall** be submitted in accordance with *Federal Acquisition Regulation* (FAR) Part 19, with specific attention paid to FAR 19.704 and FAR 52.219-9. The instructions for preparation and submission of the *Subcontracting Plan* and the subcontract participation plan appear in Section L.16.2.7.1.

The Contractor **shall** subcontract a minimum of 25 percent of the total contract price to small business concerns. The Contractor may use second- and third-tier subcontractors to meet the subcontract minimum of 25 percent of total contract price.

#### **C.5.11 Award Fee Determination**

The *Award Fee Determination Plan* (AFDP) (see Section J-3, *Award Fee Determination Plan*) establishes the basic procedures and criteria for the periodic evaluation of, and award fee determination for, DADS performance. The award fee provides a performance incentive for the Contractor and gives the Government a tool to identify and reward superior performance. The amount of award fee the Contractor earns is based on both an objective/quantitative and a subjective/qualitative evaluation by the Government of the quality of the Contractor's performance as measured against the criteria contained in the *AFDP*.

The *AFDP* includes a self-evaluation component that gives the Contractor the opportunity to assess its performance on the contract. The self-evaluation report will be used to determine the award fee. The Contractor may provide a *Contractor Self-Evaluation Report* in accordance with the Government's *AFDP*.

#### **C.5.12 Quality Management**

The Offeror **shall** describe, as a component of the PMP, a quality management approach for ensuring that compliant products and services are provided to the Government. The quality management approach **shall** describe the Offeror's quality system, including quality assurance and quality control policies, processes, products, roles and responsibilities, reviews, and reports. The quality management approach **shall** integrate with the Offeror's system life cycle, be consistent with processes described in the Section J-9, *Quality Assurance Surveillance Plan*, and describe the application of the quality system as it applies to the implementation of the Offeror's proposed solution.

During Phase 1, Transition Planning, the Contractor **shall** observe, interface with, and work with the incumbent Contractor and the Government to gain in-depth knowledge of the DADS Program quality approach and requirements.

No later than end of Phase 2, Transition, the Contractor **shall** deliver the Contractor's *Quality Management Plan (QMP)*. The Contractor's *QMP* **shall** be based on the Contractor's quality management approach and tailored to reflect its in-depth knowledge of the DADS Program quality approach and requirements. The Contractor's *QMP* **shall** include the activities, roles and responsibilities, work products, deliverables, resources, events, schedules, reviews, and reports of the Contractor's quality system to be used in Phase 3, Production.

The Government and the Contractor **shall** conduct a review and as necessary update the Contractor's *QMP* as part of the annual proposal process to ensure the continued effectiveness of the Contractor's quality management processes.

#### **C.5.13 Risk Management**

Risk Management identifies, mitigates and monitors risks associated with the DADS Program. The Contractor **shall** report all identified risks whether under Contractor or Government control. The Contractor is responsible for tracking and mitigating risks associated with activities under the Contractor's control and risks that the Government directs the Contractor to monitor.

The Offeror **shall** describe, as a component of the PMP, a risk management approach for identifying, assessing, mitigating, and monitoring risks and risk response actions. No later than the end of Phase 1, Transition Planning, the Contractor **shall** submit a *Risk Management Plan* that follows the guidelines in NIST Special Publication 800-30 and describes the policies, processes, products, roles and responsibilities, reviews, and reports necessary for identifying, determining the impact of, tracking and mitigating risks. The *Risk Management Plan* **shall** include a Risk Register of program risks. The Offeror **shall** submit the initial Risk Register as an attachment to the PMP with the response to this solicitation.

During Phase 1, Transition Planning, the Contractor **shall** observe, interface with, and work with the incumbent Contractor and the Government to gain in-depth knowledge of the DADS Program risk management processes and requirements as practiced and defined in the Government's *Risk Management Plan*.

The Contractor **shall** hold a joint Risk Management meeting with the Government at least monthly and, as requested, participate in the Government's Risk Management meetings. The Contractor **shall** report on information and status of risks contained in the Contractor's Risk Register as necessary (at least monthly as a result of the joint Risk Management meeting). In addition, the Contractor **shall** review and update as necessary the *Risk Management Plan* as part of the annual proposal process.

#### **C.5.14 Change Management**

The Government's *Change Management Strategy* (Government's *CMS*) (see Section J-8 *Change Management Strategy*) documents the Government's vision on planning, implementing, recording, assessing, and approving changes to the scope, and technical, cost, and schedule baselines of the DADS Program.

The Offeror **shall** describe, as a component of the PMP, a change management approach that describes the policies, processes, products, roles and responsibilities, reviews, and reports necessary for controlling and managing proposed changes. The change management approach **shall** include or address the

following content: requirements management, release management, infrastructure management, configuration management, incident management, and contract management in a manner consistent with the Government's *Change Management Strategy*. The change management approach **shall** integrate with the Offeror's system life cycle and the Offeror's management decision-making processes.

During Phase 1, Transition Planning, the Contractor **shall** observe, interface with, and work with the incumbent Contractor and the Government to gain in-depth knowledge of the DADS Program change management processes and requirements.

No later than end of Phase 2, Transition, the Contractor **shall** deliver the Contractor's *Change Management Plan*. The Contractor's *Change Management Plan* **shall** be based on the Contractor's change management approach and tailored to reflect the Contractor's in-depth knowledge of the DADS Program change management processes and requirements. The Contractor's *Change Management Plan* **shall** establish the processes, work products and deliverables for documenting and controlling changes to DADS Program baselines. The change control process **shall** consider risk, cost, and schedule impacts. The Contractor's *Change Management Plan* **shall** include the activities, roles and responsibilities, work products, deliverables, resources, schedules, reviews, and reports of the Contractor's change management processes to be used in Phase 3, Production.

The Government and the Contractor **shall** conduct a review and update as necessary the Contractor's *Change Management Plan* as part of the annual proposal process to ensure the continued effectiveness of the Contractor's change management processes.

#### **C.5.15 Performance Measures**

The DADS Program uses a performance-based strategy for conducting work and contracting for services. Outcome-oriented goals and objectives exist for the DADS Program, with quantitative business and technical metrics derived from these objectives. Qualitative measures provide a balance against quantitative measures when assessing the Contractor's performance. The metrics are used to determine whether DADS Program objectives are being achieved and assess the Contractor's performance. Metrics are used to determine award fees, justify the granting of incentives, and justify the assessment of penalties. Metrics are used to monitor the progress of contractual work and facilitate oversight by the Government.

The Government's *Performance Measures* (see Section J-4, *Performance Measures*) provides DADS performance metrics, identifies what needs to be measured to assess program and Contractor performance, and traces performance to program goals and objectives. The Government's *Performance Measures* do not include specific target values to be obtained or baseline values from which improvements can be measured. Specific target values and baseline values will be negotiated after contract award.

The Offeror **shall** describe, as a component of the PMP, a performance measurement approach that describes the Offeror's performance measures, analysis techniques, processes, products, roles and responsibilities, reviews, and reports. The performance measurement approach **shall** integrate with the Offeror's system life cycle and describe the application of the performance measures as they relate to the Offeror's proposed technical approach.

During Phase 1, Transition Planning, the Contractor **shall** observe, interface with, and work with the incumbent Contractor and the Government to gain in-depth knowledge of DADS Program performance measures and performance reporting requirements and derive, as applicable, measurement baselines and

thresholds from DADS Program historical data. The Contractor **shall** negotiate with the Government in the selection and establishment of the performance measures, baseline values, and variance thresholds to be applied in the assessment of the Contractor's performance.

No later than the end of Phase 2, Transition, the Contractor **shall** deliver the Contractor's *Performance Measurement Plan*. The Contractor's *Performance Measurement Plan* **shall** be based on the Contractor's performance measurement approach and tailored to reflect the Contractor's in-depth knowledge of DADS Program outcome-oriented goals, objectives, and performance measures. The Contractor's *Performance Measurement Plan* **shall** describe the processes, integrated with DADS operational functions, that collect, verify, and analyze performance data as well as report variances, root causes, trends, issues, and corrective and preventive actions. The Contractor's *Performance Measurement Plan* **shall** describe individual measures, measurement baselines (established from industry standards or, as applicable, derived from DADS Program historical data), and favorable and unfavorable measurement variance thresholds.

The Contractor's *Performance Measurement Plan* **shall** include the activities, roles and responsibilities, work products, deliverables, resources, events, schedules, reviews, and reports of the Contractor's performance measurement system to be used in Phase 3, Production. The Contractor **shall** use the performance measurement processes described in the Contractor's *Performance Measurement Plan* during the period of performance and evolve the processes, measures, and baselines, as necessary, to adapt to the improvements in DADS Program processes, advancements in technology, and the evolution of the Government's business needs.

The Government and the Contractor **shall** conduct a review and update as necessary the Contractor's *Performance Measurement Plan* as part of the annual proposal process to ensure the continued effectiveness of the Contractor's performance measurement processes.

### C.6 Option for Ad Hoc Tabulation Replacement

The Government recognizes that the legacy DADS Ad Hoc Tabulation system, known as the Advanced Query (AQ) System, is approaching obsolescence. Therefore, this solicitation requires the Offeror to propose, as an option, a technical approach to replacing the legacy AQ system, which could include providing ad hoc tabulation functionality through an integrated extension of the replacement tabulation system (see Section C.4.7.2, Tabulation System Replacement). Ad Hoc Tabulation includes rigorous results filtering that allows Internet users to construct interactive queries based on data available in census and survey microdata files (see Section J-7, DADS Overview). Replacement of Ad Hoc Tabulation functionality **shall** satisfy the requirements for interactive Ad Hoc Tabulation and all relevant requirements as stated in the SRD (see J-1, System Requirements Document) and this Performance Work Statement. The Ad Hoc Tabulation System **shall** support data from the Census 2000 short-form, Census 2000 long-form (sample), Census 2010 short-form and sample data from the American Community Survey.

The Offeror **shall** describe the approach to replacement of the legacy DADS Ad Hoc Tabulation system. The approach to ad hoc tabulation replacement **shall** describe at a minimum, the incremental replacement of the legacy Ad Hoc Tabulation System, **shall** the proposed architecture, system replacement activities, work products, deliverables, resources, and a schedule of events and milestones. The approach to ad hoc tabulation replacement **shall** describe an initial, high-level design for the replacement of Ad Hoc Tabulation functionality, support the incremental deployment of replacement functionality, and be consistent with the Offeror's system life cycle methodology. If the Government exercises the Option for

Ad Hoc Tabulation Replacement, the Contractor **shall** review and update the *Plan for System Replacement* (see Section C.4.7 Replacement of DADS Systems).

The Government requires the incremental construction (including hardware and software procurement), testing, and deployment of systems so that the replacement functionality coincides with the DADS Program business priorities (i.e. the interactive Ad Hoc Tabulation functionality to access 2010 Census data is required prior to porting and accessing Census 2000 data).

Proposed Ad Hoc Tabulation Replacement **shall**:

- Improve economies and efficiencies
- Include documentation on the proposed physical and logical architecture
- Include training materials and an adequate help function
- Maximize the use and reuse of COTS software products for the replacement system
- Demonstrate the Contractor's awareness of technology advances
- Identify risks, challenges and mitigations related to transition from the legacy system to a proposed replacement system
- Be scaleable and flexible, with the ability to support interactive Ad Hoc Tabulation for additional censuses and surveys

The Offeror's approach to implementation of this option, including transition, **shall** be accomplished with minimal disruption to the Government's Business Operations. The incremental development and deployment of the replacement Ad Hoc Tabulation capability **shall** provide functionality in increments, and not delay functionality until the entire replacement system is complete.

If the Government exercises the option, the Contractor **shall** begin activities for the replacement of Ad Hoc Tabulation functionality no earlier than October 1, 2009 and complete activities no later than September 30, 2012.

**[END OF SECTION C]**